ABSTRACT

Disclosed is an AFIFD mounted on the front surface and both side surfaces of an amphibious vehicle to provide additional buoyancy. The AFIFD allows safe swimming of the amphibious vehicle, provides rapidity through automated folding and unfolding processes. The AFIFD has a membrane structure having a seal function and a plate structure having protection power, which are organically combined with each other, to provide both a seal function and protection power. The AFIFD is provided with air while being unfolded by the operation of driving means when the amphibious vehicle swims in water, so that the membrane structure and the plate structure are unfolded to form a completely sealed floating space. When the amphibious vehicle does not swim in water, the structures are folded and closed fixed to a vehicle body, so that the amphibious vehicle can run on ground without any difficulty.